# media release

Colorado Department of Agriculture
www.colorado.gov/ag
www.facebook.com/coloradoag

#### FOR IMMEDIATE RELEASE

February 10, 2014

Contact: Christi Lightcap, (303) 239-4190, <a href="mailto:Christi.Lightcap@state.co.us">Christi.Lightcap@state.co.us</a>

## CDA Explores Future of Agricultural Energy Use

LAKEWOOD, Colo. – Through the "Advancing Colorado's Renewable Energy and Energy Efficiency" (ACRE³) program, the Colorado Department of Agriculture hopes to create and implement a road map for Colorado agricultural energy use. Two new reports are available that explore small hydropower and renewable heating and cooling opportunities in agriculture.

"The program's purpose is to promote the feasibility and development of agricultural energy-related projects," said Eric Lane, CDA's Conservation Services Division director. "In past years, ACRE<sup>3</sup> has funded a broad array of research, feasibility, and implementation projects for agricultural energy use; these new reports help provide valuable insight into how producers can save energy and money in two specific technology areas."

## **Small Hydropower Report**

The goal of this project was to identify small hydropower renewable energy opportunities based on the "achievability" of those opportunities: the lowest hanging fruit for hydropower development in Colorado agriculture.

The report highlights the need to create a program focused on developing hydro-mechanically driven and hydro-electrically powered center pivots in areas of Colorado where it is feasible and cost-effective. Recommended features of this program include:

- Convene a statewide meeting of organizations that can help realize the agricultural hydropower potential in pressurized pivots. The purpose of the meeting will be to review research results from the agricultural hydropower report and seek consensus on a plan to leverage the combined resources of existing Colorado organizations to support development of agricultural hydropower.
- Host several regional meetings to educate producers and partners about the opportunities to develop this application of small hydropower.
- Implement several demonstration projects in regions around Colorado to serve as models and readily accessible touchstones for producers.

Additional information including proposed plans, maps of hydropower potential areas, barriers, and program costs can be found at <a href="https://www.colorado.gov/ag/energy">www.colorado.gov/ag/energy</a>.

### Renewable Heating & Cooling (RH&C) Report

The goal of this project was to identify which facets of the Colorado agriculture industry can best harness and apply these renewable energy resources to their operations, identify barriers to implementation, and identify public and private partners that can support the development of these renewable energy resources. The analysis focused primarily on solar hot water/air and ground source heat pump technologies.

Recommended features of a RH&C program include:

- Develop education and demonstration sites for low-tech RH&C applications such as geothermal tempering of stock tanks, loafing sheds, thermal siphons for outbuildings, passive night-time cooling, etc.
- Develop a program focused on integrating RH&C technologies into sectors of the Colorado agricultural economy that can profit from them (e.g., dairies, pork and poultry, feed mills, and perhaps greenhouse, brewing, and fruit/vegetable/food processing operations).

RH&C includes both high and low tech solutions to producers' heating and cooling needs. Several ag sectors are positioned to leverage these technologies including dairy, pork, poultry, and feed mills.

The complete analysis including applications, costs and benefits, and case studies can be found at <a href="https://www.colorado.gov/ag/energy">www.colorado.gov/ag/energy</a>.

In 2012, the Colorado General Assembly reauthorized funding over five years for CDA's ACRE<sup>3</sup> program. The Department will use the information from these new reports to focus ACRE<sup>3</sup> resources on the implementation of technologies in the most cost effective ways possible to benefit Colorado agriculture. Shortly, the Department will announce its implementation plans for 2014-5.

###